

29 Feb 1991

## TSTTM-C

### TEST SET, TELECOMMUNICATIONS

**1. GENERAL.** This procurement requires a telecommunications test set capable of performing measurements on voice, program, and data circuits.

**2. CLASSIFICATION.** Type II, Class 5, Style D, and Color R in accordance with MIL-T-28800 for shipboard applications. The convertible/rackmountable requirement is invoked.

**2.1 Electromagnetic interference requirements.** The requirements of MIL-T- 28800 are limited to CE01, CE03, CS01, CS02 (0.05 to 100 MHz), CS06, RE01 (back panel search excluded), RE02 (14 kHz to 1 GHz), and RS03.

**3. OPERATIONAL REQUIREMENTS.** The equipment shall measure noise, noise-with-tone, noise-to-ground (from 50 to 110 dBrn), signal-to-noise ratio, impulse noise, and P/AR. C-message, program, 3 kHz, and 15 kHz flat frequency weighting shall be provided for noise measurements. The equipment shall measure received tone level and frequency while simultaneously transmitting a tone level. The equipment shall perform all measurements within the minimum specifications identified in ANSI/IEEE Standard 743-1984 with the exception of the miscellaneous and environmental requirements which shall be governed by MIL-T-28800. Additional requirements are invoked below.

**3.1 Frequency range.** 50 Hz to 110 kHz.

**3.2 Impedances.** 135, 600, and 900 ohms.

**3.2.1 Connections.** Audio jack input and output connectors and dial terminals for connecting a lineman's handset.

**3.3 Display.** Digital readouts for input and output frequencies and levels shall be provided.

**3.4 Monitor.** A built-in speaker with volume control shall be provided to vary speaker output level of received or transmitted signals.

**3.5 Rackmounting.** The equipment shall be contained in a Style D enclosure for portability and shall be provided with a conversion kit which will allow rack-mounting in accordance with the convertible/-rackmountable requirements of MIL-T-28800.

## **4. GENERAL REQUIREMENTS.**

**4.1 Power source.** MIL-T-28800 nominal and dc internal power source requirements are invoked as detailed below.

**4.1.1 Nominal power source.** Operation at 400 Hz is not required. Maximum power consumption: 50W.

**4.1.2 DC internal power source.** Internal batteries and charger are required. Minimum operating time shall be 3 hours following a maximum recharge time of 14 hours.

**4.2 Weight.** 6.8 kg (15 lb) maximum.

**4.3 Lithium batteries.** Per MIL-T-28800, lithium batteries are prohibited without prior authorization. A request for approval for the use of lithium batteries, including those encapsulated in integrated circuits, shall

be submitted to the procuring activity at the time of submission of proposals. Approval shall apply only to the specific model proposed.